

CLAIM SET AS AMENDED:

1-12. (Canceled)

13. (New) An information carrier medium which comprises:

at least first and second sheet members each having first and second surfaces opposite to each other, said first and second sheet members being laminated together with the first surface of the first sheet member bonded to the first surface of the second sheet member; and

a security indicium formed on at least one of the first surfaces of the respective first and second sheet members, said security indicium being made of two inking materials for responding to different wavelengths of incident light for giving out light, the light given out by one of the two inking materials having a first wavelength different from a second wavelength, the light given out by the other of the two inking materials having a first wavelength and not having a second wavelength different from the first wavelength, the light given out by the other of the two inking materials not having the first wavelength and having the second wavelength.

14. (New) The information carrier medium as claimed in claim 13, wherein one of the inking materials is of a kind capable of transmitting the light of the first wavelength, and the other of the inking materials is capable of transmitting the light of the second wavelength and absorbing the light of the first wavelength when irradiated by the incident light.

15. (New) The information carrier medium as claimed in claim 13, wherein one of the inking materials is of a kind capable of emitting light of the first wavelength, and the other of the inking materials is capable of emitting the light of the second wavelength when irradiated by the incident light.

16. (New) The information carrier medium as claimed in claim 13, wherein one of the inking materials is capable of scattering the light of the first wavelength, and the other of the inking materials is capable of scattering the light of the second wavelength when irradiated by the incident light.

17. (New) The information carrier medium as claimed in claim 13, wherein one of the inking materials is capable of transmitting the light of the first wavelength and absorbing a light of the second wavelength, and the other of the inking materials is capable of emitting the light of the second wavelength when irradiated by the incident light.

18. (New) The information carrier medium as claimed in claim 13, wherein the security indicium formed on such one of the first surfaces of the respective first and second sheet members is invisible to naked eyes.

19. (New) The information carrier medium as claimed in claim 18, wherein said first and

second sheet members are made of an opaque synthetic resin transparent to a light different from visible light.

20. (New) The information carrier medium as claimed in claim 13, wherein said first and second sheet members are made of an opaque synthetic resin containing a polyvinyl chloride copolymer as a principal component, and said overlay film is made of a hard polyvinyl chloride.

21. (New) The information carrier medium as claimed in claim 13, wherein said security indicium comprises a bar code made of the two inking materials.

22. (New) The information carrier medium as claimed in claim 13, wherein said security indicium comprises characters made of the two inking materials.

23. (New) The information carrier medium as claimed in claim 13, further comprising an overlay film integrated with an outer surface of said at least first and second sheet members laminated together, the overlay film having a magnetic strip layered on an outer surface thereof.

24. (New) An electro-optical reader for reading an information carrier medium comprising at least first and second sheet members each having first and second surfaces opposite to each other, said first and second sheet members being laminated together with the

first surface of the first sheet member bonded to the first surface of the second sheet member; and a security indicium formed on at least one of the first surfaces of the respective first and second sheet members, said security indicium being made of two inking materials for responding to different wavelengths of incident light for giving out light, the light given out by one of the two inking materials having a first wavelength and not having a second wavelength different from the first wavelength, the light given out by the other of the two inking materials not having the first wavelength and having the second wavelength, said reader comprising:

two sources of projecting the lights of different wavelengths towards the information carrier medium to illuminate a portion of the information carrier medium in register with the security indicium;

a detector for detecting rays of light obtained from that portion of the information carrier medium;

a signal processor which receives signals from said detector and provide an output signal synthesized by compensating relative distance between the lights of different wavelengths projected by said two sources;

a storage device which stores a reference signal for the first and second wavelengths in correspondence to the security indicium; and

a comparator connected with the signal processor for comparing the output signal from said signal processor with the reference signal to verify an authenticity of the information carrier medium.

25. (New) The electro-optical reader as claimed in claim 24, further comprising a mechanism for guiding the information carrier medium relative to the lights projected by said two sources, wherein said detector comprises two photo-detectors for detecting the rays of light of the first and second wavelengths, respectively, and said signal processor comprises a delay circuit for compensating a delay of signals due to a relative distance between the two photo-detectors.

26. (New) The electro-optical reader as claimed in claim 24, wherein said detector comprises a charge-coupled device line sensor.

27. (New) The electro-optical reader as claimed in claim 24, wherein said detector comprises a charge-coupled device area sensor.

28. (New) A method of verifying authenticity of an information carrier medium comprising at least first and second sheet members each having first and second surfaces opposite to each other, said first and second sheet members being laminated together with the first surface of the first sheet member bonded to the first surface of the second sheet member; and a security indicium formed on at least one of the first surfaces of the respective first and second sheet members, said security indicium being made of two inking materials for

responding to different wavelengths of incident light for giving out light, the light given out by one of the two inking materials having a first wavelength and not having a second wavelength different from the first wavelength, the light given out by the other of the two inking materials not having the first wavelength and having the second wavelength, said method comprising the steps of:

projecting lights towards the information carrier medium to illuminate a portion of the information carrier medium in register with the security indicium;

detecting rays of lights obtained from that portion of the information carrier medium;

synthesizing the detected signals to provide an output signal by compensating relative distance between the lights projected by the two sources;

comparing outputs from the photo-detector with a reference signal stored beforehand for the first and second wavelengths in correspondence to the security indicium; and

in the event that the output from the photo-detector matches with the reference signal, determining that the information carrier medium is authentic.